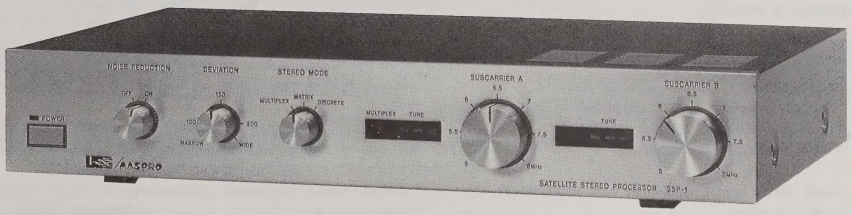
USS / MASPRO

SATELLITE STEREO PROCESSOR

Frequency Range 5-8 MHz

SSP-1



Satellite Stereo Processor MODEL SSP-1

A long anticipated product for the TVRO owner has been introduced with the perfection of the USS/MASPRO, SSP-1 Stereo Processor.

In combination with the USS/MASPRO receiver, the SSP-1 Processor will provide superb stereo audio performance.

Product Features

- Tunes all types of TVRO satellite broadcast stereo.
- 3-LED (red-yellow-red) tuning indicator along with automatic delayed AFC circuit makes for the easiest tuning and lowest distortion possible.
- Built-in noise reduction circuit eliminates undesired noise from pianissimo sections of musical passages or the soundless sections of spoken passages. Extremely low-noise audio reception is assured.
- A continuously adjustable deviation control makes it possible to receive narrow to wide audio subcarriers.

Function of Parts and Controls

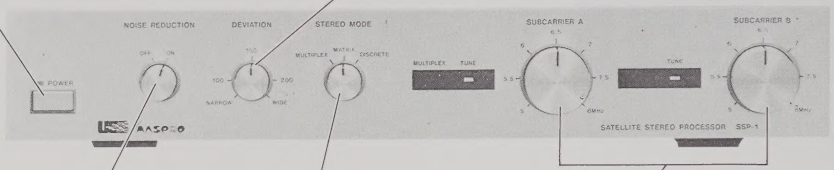
Front Panel

Power Switch

- The power indicator lights up when the button is depressed and the processor is turned on.

Deviation Control Knob

- Adjust the knob for best audio quality. For narrow subcarriers, turn the knob fully counterclockwise.



Noise Reduction Switch

- Turn the switch to ON to reduce noise which appears during the pianissimo section of a piece of music or in a no-sound passage of speech.

Stereo Mode Selector

MULTIPLEX (MONAURAL)

- Receives multiplex stereo signal, broadcast over one subcarrier. (Tune with SUBCARRIER tuning knob A.)
- Monaural is also received in this mode.

MATRIX

- Receives matrix stereo signal, broadcast over independent L+R and L−R subcarriers.
  (Tune the L+R subcarrier with SUBCARRIER tuning knob A and L−R subcarrier with SUBCARRIER tuning knob B.)

DISCRETE

- Receives discrete stereo signal, broadcast over independent L and R subcarriers.
  (Tune the L subcarrier with SUBCARRIER tuning knob A and R subcarrier with SUBCARRIER tuning knob B.)

Subcarrier Tuning Knobs A/B

- Tune in the desired subcarrier within the range of 5 to 8 MHz with the corresponding tuning knob.
- When the desired subcarrier is precisely tuned in, an indicator (yellow LED) in the middle of the front panel indicator will light up.
- During tuning, AFC is always off. The indicator will light when the set is properly tuned, and the AFC will automatically activate about 2 seconds later to hold the frequency.
  (Multiplex stereo broadcasting mode matches only SUBCARRIER tuning knob A.)

Rear Panel

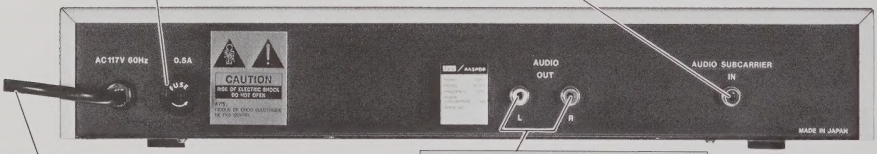
Fuse

(Glass tube type rated 0.5 A)

- Replace only with another fuse of the same rated value. (A spare 0.5 A fuse is provided.)

Audio Subcarrier Input Terminal

- Connect with the receiver Audio Subcarrier Output terminal.



AC Cord

AC 117 V 60 Hz

Audio Output Terminals

- Connect with the Auxiliary Input terminals (L & R) of the stereo amplifier.

WARNING: To prevent fire or electrical shock, do not expose this appliance to rain or moisture.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK
DO NOT REMOVE COVER (OR BACK)
NO USER-SERVICEABLE PARTS INSIDE
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

This symbol is intended to alert you of the presence of uninsulated dangerous voltage within the units enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

This symbol is intended to alert you of the presence of important operating and maintenance instructions in the literature accompanying the unit.

SAFETY INSTRUCTIONS

1. Read Instructions All the safety and operating instructions should be read before the appliance is operated.

2. Retain Instructions The safety and operating instructions should be retained for future reference.

3. Heed Warnings All warnings on the appliance and in the operating instructions should be adhered to.

4. Follow Instructions All operating and use instructions should be followed.

5. Water and Moisture The appliance should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

6. Carts and Stands The appliance should be used only with a cart or stand that is recommended by the manufacturer.

7. Wall or Ceiling Mounting The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.

8. Ventilation The appliance should be situated so that its location or position does not interfere with its proper ventilation.
For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

9. Heat The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

10. Power Sources The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

11. Grounding or Polarization The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.

12. Power-Cord Protection Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

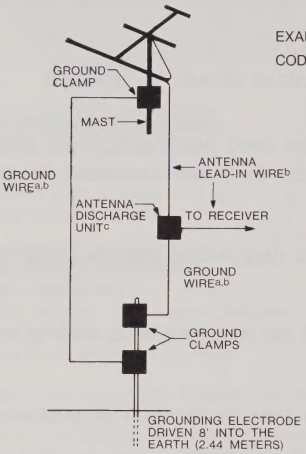
13. Cleaning The appliance should be cleaned only as recommended by the manufacturer.

14. Power Lines An outdoor antenna should be located away from power lines.

15. Outdoor Antenna Grounding If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges.

Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1981, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

See figure as shown below.



EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE INSTRUCTIONS

a Use No. 10 AWG (5.3 mm^2) copper, No. 8 AWG (8.4 mm^2) aluminum, No. 17 AWG (1.0 mm^2) copper-clad steel or bronze wire, or larger, as ground wire.

b Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4 feet (1.22 m) to 6 feet (1.83 m) apart.

c Mount antenna discharge unit as close as possible to where lead-in enters house.

16. Nonuse Periods The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

17. Object and Liquid Entry Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

18. Damage Requiring Service The appliance should be serviced by qualified service personnel when:

A. The power-supply cord or the plug has been damaged; or
B. Objects have fallen, or liquid has been spilled into the appliance; or
C. The appliance has been exposed to rain; or
D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
E. The appliance has been dropped, or the enclosure damaged.

19. Servicing The user should not attempt to service the appliance beyond that described in the operating instructions.

All other servicing should be referred to qualified service personnel.

2K52-767
N-410-1767-1

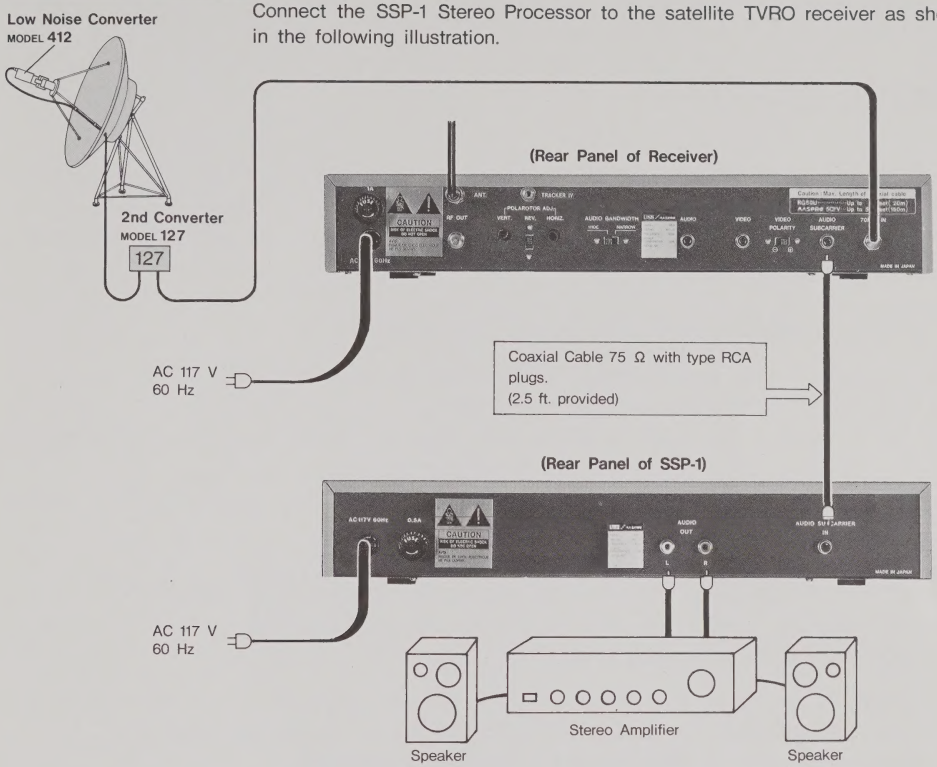
UNITED SATELLITE SYSTEMS

HIGHWAY ONE WEST
THIEF RIVER FALLS, MN. 56701

Printed in Japan

How to Hookup

Connect the SSP-1 Stereo Processor to the satellite TVRO receiver as shown in the following illustration.



Specifications

Stereo Mode	MULTIPLEX	MATRIX	DISCRETE
Frequency Range	5 to 8 MHz		
Input Level	More than ⊖50 dBm (1 kΩ)		
Deviation Control Range	75 to 300 kHz (Continuously)		
Separation (at 1 kHz)	More than 40 dB		More than 50 dB
Distortion (at 1 kHz, 75 kHz deviation)	Less than 0.1 %	Less than 0.08 %	Less than 0.5 %
S/N (CCIR-weighted at 16 dB C/N, 75 kHz deviation)	More than 45 dB	More than 50 dB	
Audio Frequency Response	20 Hz to 10 kHz	20 Hz to 20 kHz	
Noise Reduction	10 dB		
Power Consumption	6 W at 117 V AC/60 Hz		
Operating Temperature	32° to 104°F (0° to 40°C)		
Dimensions (H×W×D)	2.76"×15.75"×9.53" (70×400×242 mm)		
Weight	Approx. 7.5 lbs. (3.4 kg)		

Specifications are subject to change without notice.

The use of this device may violate Section 605 of the Communications Act of 1934, as amended, through the unauthorized interception and divulgence of radio communications; or, the use of radio communications for ones own benefit where there is no entitlement to its receipt.

Accessories

Spare Fuse 0.5 A ····· 1 pc. Type RCA Plug ····· 2 pcs. Coaxial Cable 75 Ω ····· 1 pc.
(2.5 ft. with type RCA plugs)

LIMITED WARRANTY

United Satellite Systems, hereafter USS, warrants to the original purchaser that this product shall be free from defects in workmanship for two years from the date of original purchase. During this warranty period USS will provide free of charge both parts and labor necessary to correct defects in workmanship.

To obtain this warranty service, the original purchaser must:

(1) Notify USS if a possible defect is discovered, the following information:
   (a) The model number and serial number.
   (b) A detailed description of the problem, including details of electrical connections to associated equipment and the list of such equipment.
(2) Deliver the receiver to USS or ship the same in its original container, fully insured and shipping charges prepaid.

Correct maintenance, repair and use are important to obtain proper performance from this product. Therefore, carefully read the instructions provided. This warranty does not apply to any defect that USS determines is due to:

(1) Improper maintenance or repair, including the installation of parts or accessories that do not conform to the quality and specifications of the original parts.
(2) Misuse, abuse, alteration, neglect or improper installation.
(3) Accidental or intentional damage.

All implied warranties, if any, terminate two years from the date of the original purchase. The above constitutes USS's entire obligation with respect to this product, and the original purchaser and any user or owner shall have no other remedy and no claim for incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation and exclusion may not apply to you.

This warranty gives specific legal rights and you may also have other rights which vary from state to state. Manufacturer reserves the right to change specifications or design of this product without notice.

2K52-780

N-411-1780-3

UNITED SATELLITE SYSTEMS

HIGHWAY ONE WEST
THIEF RIVER FALLS, MN. 56701

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